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Please find below and/or attached an Office communication concerning this application or proceeding.

# Application No.

Applicant(s) 09/138.378

Hamura et al.

Office Action Summary Examiner

G. Garcia

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### - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_three \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 1) X Responsive to communication(s) filed on Aug 14, 2001 2b) X This action is non-final. 2a) This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay/1935 C.D. 11; 453 O.G. 213. **Disposition of Claims** is/are pending in the applica 4) X Claim(s) 1-12 4a) Of the above, claim(s) \_\_\_\_\_\_ is/are withdrawn from considera 5) Claim(s) is/are rejected. 6) X Claim(s) 1-12 7) Claim(s) \_\_\_\_\_ is/are objected to. are subject to restriction and/or election requirem 8) 🔲 Claims \_\_ **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on \_\_\_\_\_\_ is/are objected to by the Examiner. 11) The proposed drawing correction filed on \_\_\_\_\_\_ is: a pproved b) disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some\* c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_\_ 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) Interview Summary (PTO-413) Paper No(s). 15) X Notice of References Cited (PTO-892) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152) 20) Other: 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).

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#### **DETAILED ACTION**

1. The request filed on 8/14/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/138,378 is acceptable and a CPA has been established. An action on the CPA follows. Claims 1-12 are pending in this application. The preliminary amendment filed 8/14/01 has been entered, wherein claims 1-3,5-8 and 10-12 have been amended.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.
- 3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by <u>Kageyama et al.</u> (5,774,638).

With regard to claim 1, <u>Kageyama et al.</u> teaches a printer (figure 1, items 11 and 18) outputting a plurality of types of print data corresponding to one or more images to be printed on page (i.e. col. 5, lines 41-53 and col. 29, lines 4-11), each of the types of print data having an attribute comprising one of a first kind of attribute and a second kind of attribute (i.e. col. 3, lines 10-24, fig. 26, and col. 29, lines 4-11 describes how the attribute can be of a first kind such as text or of a second kind such as images)), said printer comprising: an image buffer (i.e. figure 1, item 141 or

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142) having a plurality of storage locations (i.e. figures 20-26, see also col. 27 and 28) and storing each type of print, one by one, in a different one of storage locations according to one of a first kind of attribute and a second kind of attribute of each type of print data (i.e. col. 3, line 10-20, col. 22, lines 62-67, and col. 23, lines 48-55, see also figure 26); a plurality of video interfaces (i.e. figure 1, items 104,114 and 124), each of said video interfaces independently reading each of the types of print data stored in a corresponding storage location of said image buffer (reads on figure 1, the interfaces (104,114 and 124) read the data from the shared memory (141) to be processed by the different image processors (107,117 and 127)); a print data integration circuit (reads on figure 1, item 100, which controls the integration of data to be printed by the print engine 18, see col. 3, line 55 thru col. 4, line 11) integrating the plurality of types of print data read by the video interfaces to be printed on one page (e.g. col. 5, lines 41-53 and col. 29, lines 4-11); and an output mechanism (figure 1, item 18) outputting the integrated print data on one page (i.e. col. 3, line 55 thru col. 4, line 11 and col. 5, lines 41-53).

With regard to claim 2, <u>Kageyama et al</u>. further teaches the plurality of types of print data stored in said image buffer contain form print data corresponding to a form as the first kind of attribute and text print data corresponding to a text, as the second kind of attribute, to be printed over the form (fig. 16 and col. 24, lines 7-40).

With regard to claim 3, <u>Kageyama et al</u>. further teaches a printer having separation unit (reads on fig. 1, item 100) for separating print data corresponding to an image as the first kind of attribute with a text into a type of print data corresponding to the image and type of print data corresponding to the text, as the second kind of attribute(e.g. col. 3, line 10 thru col. 4, line 19);

and a storage unit (fig. 1, item 141) for storing each of the types of separated in said image buffer according to the attribute of each type of separated print data (e.g. col. 3, lines 10-32 and fig. 26).

With regard to claim 4, <u>Kageyama et al.</u> further teaches a printer comprising a plurality of image processing circuits (fig. 1, item 100,110, or 120), each of said image processing circuits applying an image process to the type of print data read by a corresponding one of said video interfaces (col. 5, lines 42-53).

With regard to claim 5, Kageyama et al. further teaches a plurality of types of print data stored in said image buffer are obtained by dividing print data corresponding to the image to be printed data on one page into a plurality of bands, each of the bands corresponding to one of the first kind of attribute and the second kind of attribute, and wherein said print data integration circuit alternately selects the print data read by each of said video interfaces and outputs the selected print data to said output mechanism (e.g. figures 20-24 and col. 5, lines 42-53). 5,774,638).

With regard to claims 6-12, the limitations of claims 6-12 are covered by the limitations of claims 2-5 above (e.g. part of the printer of claims 2-5 consist of the controller as claimed in claims 7-10).

4. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by <u>Schweid et al.</u> (5,835,630).

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With regard to claim 1, Schweid et al teaches a printer (e.g. col. 11, lines 8-21) outputting a plurality of types of print data corresponding to one or more images to be printed on page (i.e. fig. 11), each of the types of print data having an attribute comprising one of a first kind of attribute and a second kind of attribute (i.e. col. 10, lines 60-67), said printer (e.g. col. 30, lines 3-16) comprising: an image buffer (i.e. figure 4, item 306 or figure 11, item 10) having a plurality of storage locations (i.e. col. 3, lines 43-65) and storing each type of print, one by one, in a different one of storage locations according to one of a first kind of attribute and a second kind of attribute of each type of print data (i.e. col. 3, lines 43-65); a plurality of video interfaces (i.e. reads on fig. 11, which allow the processors within 30 to receive data from the buffer), each of said video interfaces independently reading each of the types of print data stored in a corresponding storage location of said image buffer (reads on figure 11, which depicts the different means (31,32 or 34) to receive data from the buffer are independent of each other interfaces read the data from the shared memory to be processed by the different image processors (31,32 or 34)); a print data integration circuit (reads on figure 11, item 41, which controls the integration of data to be printed, integrating the plurality of types of print data read by the video interfaces to be printed on one page (see col. 11, lines 8-21); and an output mechanism (figure 1, item 18) outputting the integrated print data on one page (see col. 11, lines 8-21 and col. 29, line 62 thru col. 30, line 17).

With regard to claim 2, <u>Schweid et al</u> further teaches the plurality of types of print data stored in said image buffer contain form print data corresponding to a form as the first kind of attribute and

text print data corresponding to a text, as the second kind of attribute, to be printed over the form (e.g. col. 3, lines 43-65 or col. 24, lines 29-47).

With regard to claim 3, Schweid et al. further teaches a printer having separation unit for separating print data corresponding to an image as the first kind of attribute with a text into a type of print data corresponding to the image and type of print data corresponding to the text, as the second kind of attribute (e.g. col. 24, lines 29-40); and a storage unit for storing each of the types of separated in said image buffer according to the attribute of each type of separated print data (e.g. col. 24, lines 29-57).

With regard to claim 4, <u>Schweid et al</u> further teaches a printer comprising a plurality of image processing circuits (fig. 11, item 31-34), each of said image processing circuits applying an image process to the type of print data read by a corresponding one of said video interfaces (see figure 11).

With regard to claim 5, Schweid et al further teaches a plurality of types of print data stored in said image buffer are obtained by dividing print data corresponding to the image to be printed data on one page into a plurality of bands, each of the bands corresponding to one of the first kind of attribute and the second kind of attribute, and wherein said print data integration circuit alternately selects the print data read by each of said video interfaces and outputs the selected print data to said output mechanism (e.g. col. 24, lines 29-57).

With regard to claims 6-12, the limitations of claims 6-12 are covered by the limitations of claims 2-5 above (e.g. part of the printer of claims 2-5 consist of the controller as claimed in claims 7-10).

#### Conclusion

Applicant's arguments filed 8/14/01 have been fully considered but they are not persuasive. 5. With regard to Applicant's argument that Kageyama does not teach a memory having a plurality of storage areas storing according to its attribute or type and that the memory appears to correspond to a plurality of pages. Examiner respectfully disagrees with Applicant's conclusion. Examiner asserts that the memory of Kageyama teaches having a plurality of storage areas according to its attributes or type (i.e. figures 1, and 20-26). Figure 1 of Kageyama depicts a shared memory (141 or 142, i.e. col.27, lines 5-7) that can have a plurality of areas as described in figure 26, which depicts how a page can contain different subcommands that represent different types of images as shown in figures 20-23. In figures 20-23 the information is divided into different types or regions having different attributes parameters of the first kind or the second kind, these information is stored in memory according to a memory location and attribute as shown in figure 26. Figure 1, depicts how the master processor (100) integrates the different parts of the page by processing different parts of the page by different processors (i.e. such as 110 and 120), therefore enabling the system of Kageyama to independently process data by using the different processors and producing parallel processing as described in column 4, lines 21-29. With regard to Applicant's argument that Kageyama does not teach independently reading the

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types of data according to attribute of the data. Examiner respectfully disagrees with Applicant's

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conclusion. Examiner asserts that Kageyama perform different processes to different types of data

and therefore reads the independently according to attribute (i.e. figure 26 and col. 4, lines 21-29

& col. 29, lines 4-11). e.g. figure 26 describes how the print data contains different attribute

parameters having subcommands and col. 4, describes how the different types of data is processed

independently by allowing the different processors to retrieve (or read) the data from the shared

memory and therefore processing the data in parallel.

With regard to Applicant's argument that Kageyama does not teach different types of regions

having different types of attribute parameters.. Examiner asserts that col. 29, lines 4-11) clearly

teaches figure 1, teaches the different types of regions having different types of attribute

parameters.

6. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Gabriel I. Garcia whose telephone number is (703) 305-8751. The examiner

can normally be reached Monday thru Thursday from 7:30AM-6:00PM.

Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703)\872-9314 (official or unofficial)

PRIMARY EXAMINER

Gabriel I. Garcia
Primary Examiner
December 5, 2001